

**DIRECT TESTIMONY AND EXHIBITS OF**

**DANIEL F. SULLIVAN**

**ON BEHALF OF**

**THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF**

**DOCKET NO. 2020-4-G**

**IN RE: ANNUAL REVIEW OF PURCHASED GAS ADJUSTMENT AND GAS  
PURCHASING POLICIES OF PIEDMONT NATURAL GAS COMPANY, INC.**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.**

**A.** My name is Daniel F. Sullivan. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina, 29201. I am employed by the South Carolina Office of Regulatory Staff (“ORS”) as the Deputy Director of the Audit Department.

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

**A.** I received a Bachelor of Science Degree in Business Administration with a major in Accounting from the University of South Carolina in December 1998. In February 2005, I began my employment with ORS and since have participated in cases dealing with the regulation of telecommunications, natural gas, electric, radioactive waste disposal, water and wastewater utilities.

**Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA (“COMMISSION”)?**

**A.** Yes. I have previously testified before the Commission.

**Q. WHAT IS THE MISSION OF THE OFFICE OF REGULATORY STAFF?**

A. ORS represents the public interest as defined by the South Carolina General Assembly as:

[T]he concerns of the using and consuming public with respect to public utility services, regardless of the class of customer, and preservation of continued investment in and maintenance of utility facilities so as to provide reliable and high-quality utility services.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. The purpose of my testimony is to set forth findings resulting from ORS's examination of Piedmont Natural Gas Company, Inc.'s ("Company" or "Piedmont") purchased gas deferred account, storage inventory activity, and hedging account activity, for the period April 2019 through March 2020 ("review period").

**Q. WAS THE REVIEW PERFORMED BY YOU OR UNDER YOUR SUPERVISION?**

A. Yes. The review to which I testify was performed by me or under my supervision.

**Q. IN CONNECTION WITH YOUR TESTIMONY, DID YOU PREPARE OR CAUSE TO BE PREPARED ANY EXHIBITS?**

A. Yes, the Audit Department prepared Audit Exhibit DFS-1, titled "Purchased Gas Deferred Account Analysis Summary," Audit Exhibit DFS-2, titled "Storage Inventory Activity," and Audit Exhibit DFS-3, titled "Hedging Account Activity," in connection with this testimony.

**Q. UNDER WHAT AUTHORITY DOES ORS MONITOR THE ACTIVITY IN PIEDMONT'S PURCHASED GAS DEFERRED ACCOUNT?**

A. In Order No. 88-294, the Commission found that:

(1) A true-up for differences between billed and filed rates is appropriate and necessary to ensure that Piedmont's customers pay no more than Piedmont's actual cost of gas.

(2) A true-up of demand charges for changes in sales volumes is appropriate and necessary to ensure that Piedmont's customers pay no more than Piedmont's actual cost of gas.

(3) The Company is to maintain an account reflecting its gas costs each month, the amount of gas costs recovered each month, and amounts deferred from month to month. The Company is also required to file, with the Commission, a report on a monthly basis showing the status of this purchased gas deferred account.

Additionally, with the issuance of Commission Order No. 2002-223 dated March 26, 2002, the Company is required to file regular reports on the status of the hedging program and the results of its hedging activities.

**Q. HAS ORS EXAMINED THE COMPANY'S PURCHASED GAS DEFERRED ACCOUNT?**

**A.** Yes. ORS has examined the activities included in the purchased gas deferred account. In addition, ORS has examined the Company's gas storage inventory activity and hedging account activity for the review period.

**Q. WHAT IS INCLUDED IN AUDIT EXHIBIT DFS-1, PURCHASED GAS DEFERRED ACCOUNT ANALYSIS SUMMARY?**

**A.** Audit Exhibit DFS-1 presents, for each month of the review period under examination, the components which comprise the Company's (over)/under collection in the purchased gas deferred account. These components are:

1        **Commodity True-Up** – These amounts represent the difference in the Company’s actual  
2        gas costs on a monthly basis as compared to the benchmark cost of gas included in the  
3        Company’s Gas Cost Recovery Mechanism (“GCRM”) filings during the review period.  
4        The Company’s benchmark cost of gas at the beginning of the review period was \$2.75 per  
5        dekatherm, established as a result of the Company filing GCRM #149, effective the first  
6        billing cycle in March 2019. The Company’s benchmark cost of gas at the end of the  
7        review period was \$2.00 per dekatherm, established as a result of the Company filing  
8        GCRM #151, effective the first billing cycle in January 2020. In accordance with  
9        Commission Order No. 2010-250 dated March 30, 2010, the Company includes unbilled  
10       volumes in its commodity true-up calculations in order to achieve a better matching of gas  
11       cost collections versus actual gas costs in the months they occur. South Carolina’s portion  
12       of commodity true-up for the review period increased the over-collection by \$2,061,188.

13       **Demand True-Up** – These amounts represent the (over)/under collection of demand  
14       charges incurred by the Company as compared to demand charges billed and collected  
15       from customers. In accordance with Commission Order No. 2010-250, the Company  
16       includes unbilled volumes in its demand true-up calculations in order to achieve a better  
17       matching of gas cost collections versus actual gas costs in the months they occur. The  
18       design day factor for allocation of demand charges to South Carolina changed from 14.92%  
19       to 14.76% effective November 1, 2019, due to North Carolina Utilities Commission  
20       (“NCUC”) Docket No. G-9 Sub 743, Order dated October 31, 2019. The methodology used  
21       to calculate the design day factor for demand allocation of 14.76% is in compliance with  
22       Commission Order No. 2004-501, dated October 15, 2004. Demand true-up for the review  
23       period decreased the over-collection by \$4,021,196.

1        **Negotiated Losses** – In competition with alternate fuels, the Company's GCRM allows it  
2        to maintain its industrial load by selling gas at less than the approved tariff, resulting in  
3        margin losses. During the review period there were no negotiated losses, so there was no  
4        effect on the Company's (over)/under-collection.

5        **Secondary Market Sharing** – Effective with rates approved in Commission Order No.  
6        2002-761 dated November 1, 2002, the Company credited 75% of the margin from off-  
7        system sales and capacity release transactions to the purchased gas deferred account. The  
8        remaining 25% was retained by the Company. Additionally, the Order provided capacity  
9        release credits and off-system sales would be allocated to South Carolina using the same  
10       design day methodology approved for fixed demand costs.

11       In accordance with NCUC's Order in Docket No. G-9 Sub 682, dated September 29, 2016,  
12       Approving Merger Subject to Regulatory Conditions and Code of Conduct regarding the  
13       merger of Piedmont and Duke Energy, 100% of margins received by Piedmont from  
14       secondary market sales to Duke Energy Carolinas, LLC and Duke Energy Progress, LLC  
15       are now credited to the purchased gas deferred gas accounts for the benefit of the  
16       ratepayers.

17       Shared margins and capacity release credits for the review period increased the over-  
18       collection by \$4,416,816. It should be noted that in compliance with Commission Order  
19       No. 95-1461 dated August 22, 1995, the Company is properly reporting capacity release  
20       activity. These capacity release credits totaling \$3,616,649 are included in the total of  
21       \$4,416,816 listed above for secondary market sharing.

22       **Weather Normalization** – In compliance with Commission Order No. 95-1649 dated  
23       November 7, 1995, the Company began recording in the purchased gas deferred account

1 weather normalization effective for the winter heating season of November through March.  
2 The weather normalization adjustment is designed to increase or decrease the margin  
3 component of the rate based on a comparison of actual weather conditions during the  
4 period, to normal weather conditions. Weather normalization adjustments for the review  
5 period decreased the over-collection by \$2,808,274 as a result of warmer than normal  
6 weather for the 2019-2020 heating season.

7 **Uncollectibles** – In Order No. 2006-527 dated October 11, 2006, the Commission  
8 approved the Company's request to remove uncollectible gas cost expense from its cost of  
9 service and authorized the recovery of these costs through the Company's purchased gas  
10 deferred account. Under this revised methodology, the commodity cost of gas portion of  
11 uncollectible accounts is now a component of the purchased gas deferred account. The  
12 balance of the uncollectible accounts expensed, including the Company's margin, will be  
13 recovered through its annual Rate Stabilization Act filing. The uncollectible gas cost  
14 adjustment decreased the over-collection during the review period by \$232,696.

15 **Supplier Refunds** – The Company received supplier refunds totaling \$19,981 during the  
16 review period. South Carolina's allocation of these refunds increased the over-collection  
17 by \$2,878.

18 **Hedging Activity Transfer** – In Order No. 2006-527, the Commission authorized the  
19 Company to transfer the balance of its cumulative hedging gains or losses to the purchased  
20 gas deferred account on a monthly basis, effective November 1, 2006. Transfer of the  
21 monthly hedging gains and losses to the purchased gas deferred account for the review  
22 period decreased the over-collection by \$867,024.

**Other Adjustments** – During the review period there were no other adjustments, so there was no effect on the Company’s (over)/under-collection.

**Interest** – In Order No. 2009-579, the Commission ordered that, effective September 1, 2009, the interest rate to calculate (over)/under collection balances to be the rate of interest as of the first day of each month for 10-year United States Government Treasury Bills, plus an all-in spread of 65 basis points (.65 percentage points). It also ordered that interest not be accrued on (over)/under collection balances which exceed \$20 million in the purchased gas deferred account. Total accrued interest for the review period increased the over-collection by \$12,775.

**Q. WHAT IS INCLUDED IN AUDIT EXHIBIT DFS-2, STORAGE INVENTORY ACTIVITY?**

**A.** During our examination, the Company provided ORS with detailed inventory calculations of its underground and liquefied natural gas (“LNG”) storage facilities. ORS accumulated the various inventory levels by storage location in total and included a summary of them in Audit Exhibit DFS-2, for Commission consideration.

The Company has contracted with six (6) underground storage facilities. Four (4) of these facilities are on the Transco System. They include General Storage Service and General Storage Service–Dominion located in Pennsylvania, Washington Storage Service located in Louisiana, and Eminence Storage Service located in Mississippi. The fifth and sixth underground storage facilities are on the Columbia Gas Transmission System. The fifth is Firm Storage Services, which is owned by Columbia Gas Transmission Corporation and operated by Columbia Gas Storage, with facilities in Pennsylvania, Virginia, and West Virginia. The sixth is Hardy Storage Company, located in West Virginia, which is jointly

owned by Columbia Gas Transmission Corporation and Piedmont. Audit Exhibit DFS-2, “Total Underground” section, details the inventory activities of these underground facilities in total. The inventory located in the six (6) underground facilities at the beginning of the review period totaled 5,190,365 dekatherms at a total cost of \$16,198,994 for a weighted average cost of \$3.1210 per dekatherm. The net inventory increased during the review period resulting in an ending inventory balance in the underground facilities of 9,161,904 dekatherms at a total cost of \$23,294,334 for a weighted average cost per dekatherm of \$2.5425. During its examination, ORS obtained verification from the storage facility operators of the volumes stored in each of these facilities at the close of the review period.

Audit Exhibit DFS-2 also contains a section titled “Total LNG” which is a summary of the various LNG inventories maintained by the Company, including Pine Needle. Pine Needle is an LNG facility located in Guilford County, North Carolina and is jointly owned by Piedmont, Transco and several other utilities and/or investors. Inventory is also stored at the Company’s LNG facilities located at LNG-Huntersville near Charlotte, North Carolina and at LNG-Bentonville in Four Oaks, North Carolina. Piedmont also has inventory at the Transco LNG facility located in Carlstadt, New Jersey. Piedmont’s records indicated LNG inventory located at these facilities at the beginning of the review period totaled 1,491,126 dekatherms at a total cost of \$5,111,437 for a weighted average cost of \$3.4279 per dekatherm. The net inventory increased during the review period resulting in an ending LNG inventory balance for these four facilities of 2,726,744 dekatherms at a total cost of \$8,176,173 for a weighted average cost per dekatherm of \$2.9985. During its



examination, ORS verified the calculation of ending inventory balances and the injections and withdrawals to the daily storage activity worksheets for each facility.

**Q. WHAT IS INCLUDED ON AUDIT EXHIBIT DFS-3, HEDGING ACCOUNT ACTIVITY?**

**A.** Audit Exhibit DFS-3 details the results of the Company's hedging program for the review period. Commission Order No. 2002-223 approved the Company's experimental natural gas hedging program.

In Order No. 2006-527, effective November 1, 2006, the Commission authorized the Company to transfer the balance of its cumulative hedging gains or losses to the purchased gas deferred account on a monthly basis. Monthly net hedging gains or losses before interest were transferred to the purchased gas deferred account and included as part of the interest calculation. Total hedging activity for the review period resulted in a decrease in the over-collection in the purchased gas deferred account of \$867,024.

As indicated on Audit Exhibit DFS-3, the cumulative loss at the end of the review period for the hedging program is \$42,309,937.

**Q. WHAT ARE ORS'S FINDINGS REGARDING PIEDMONT'S PURCHASED GAS DEFERRED ACCOUNT?**

**A.** Based on our examination, it is the opinion of ORS that the over collection balance in the purchased gas deferred account at March 31, 2020 of (\$1,450,387), shown on Company witness Tomlinson's Exhibit\_(MBT-1), is accurately stated.

**Q. WILL YOU UPDATE YOUR DIRECT TESTIMONY BASED ON INFORMATION THAT BECOMES AVAILABLE?**

1    **A.**            Yes. ORS fully reserves the right to revise its recommendations via supplemental  
2            testimony should new information not previously provided by the Company, or other  
3            sources, becomes available.

4    **Q.        DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

5    **A.**            Yes, it does.  
6

## AUDIT EXHIBIT DFS-1

**PIEDMONT NATURAL GAS COMPANY, INC.**  
**DOCKET NO. 2020-4-G**  
**PURCHASED GAS DEFERRED ACCOUNT ANALYSIS SUMMARY**  
**FOR TWELVE MONTHS ENDED MARCH 31, 2020**

Month	2019										2020			Total
	April	May	June	July	August	September	October	November	December	January	February	March		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
Beginning Balance	(2,885,925)	(2,356,702)	(1,487,973)	(1,341,452)	(421,740)	137,259	998,696	1,640,553	1,241,052	(545,606)	(583,158)	(987,923)		
Commodity True-Up	(298,793)	(322,684)	(967,966)	(367,173)	(638,304)	(380,270)	(474,687)	758,356	147,425	546,377	162,461	(225,930)	(2,061,188)	
Demand True-Up	927,247	1,399,794	1,122,780	1,495,364	1,400,956	1,487,096	1,319,052	(790,423)	(1,161,125)	(1,800,167)	(1,434,348)	54,970	4,021,196	
Negotiated Losses	0	0	0	0	0	0	0	0	0	0	0	0	0	
Secondary Market Sharing	(247,208)	(298,270)	(291,455)	(293,994)	(286,576)	(281,950)	(271,673)	(425,157)	(598,486)	(581,219)	(430,438)	(410,390)	(4,416,816)	
Weather Normalization	237	46	21	21	161	141	(2)	40,019	(236,279)	1,700,936	1,244,570	58,403	2,808,274	
Uncollectibles	47,171	50,301	56,410	40,207	37,906	13,295	4,018	(23,463)	4,921	(2,622)	1,360	3,192	232,696	
Supplier Refunds	0	0	(780)	(189)	0	(504)	0	(4)	(1,401)	0	0	0	(2,878)	
Hedging Activity Transfer	107,452	44,005	230,632	47,446	45,111	22,530	62,574	38,196	57,555	100,172	52,775	58,576	867,024	
Other Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ending Balance Before Interest	(2,349,819)	(1,483,510)	(1,338,331)	(419,770)	137,514	997,597	1,637,978	1,238,077	(546,338)	(582,129)	(986,778)	(1,449,102)		
Interest	(6,883)	(4,463)	(3,121)	(1,970)	(255)	1,099	2,575	2,975	732	(1,029)	(1,145)	(1,290)	(12,775)	
Ending Balance	(2,356,702)	(1,487,973)	(1,341,452)	(421,740)	137,259	998,696	1,640,553	1,241,052	(545,606)	(583,158)	(987,923)	(1,450,392)		
Interest Rate	3.155%	2.789%	2.650%	2.684%	2.153%	2.325%	2.344%	2.480%	2.530%	2.190%	1.750%	1.270%		

Purchased Gas Deferred Account (Over)/Under-Collection as of 3/31/20

(\$1,450,392) (1)

(1) - Variance from Exhibit (MBT-1) of (\$4.57) is due to rounding

**PIEDMONT NATURAL GAS COMPANY, INC.**  
**DOCKET NO. 2020-4-G**  
**STORAGE INVENTORY ACTIVITY**  
**FOR TWELVE MONTHS ENDED MARCH 31, 2020**

	Total Underground Injections					Total Underground Withdrawals				Total Underground Balance		
	Gross DTs	Used/Injected	Price	Commodity	Injection/Charge	W/D Charge	DTs	Price	Amount	DTs	Amount	Wtd. Cost
	#	#	\$	\$	\$	\$	#	\$	\$	#	\$	\$
Beg. Bal.										5,190,365	16,198,994	3.1210
Apr-19	2,774,645	(57,366)	2.5100	6,964,328	113,904	0	(484,321)	2.9269	(1,417,561)	7,423,323	21,859,665	2.9447
May-19	3,201,000	(66,526)	2.3346	7,472,908	122,219	0	(70,182)	2.9250	(205,279)	10,487,615	29,249,513	2.7890
Jun-19	3,308,801	(66,027)	2.3235	7,688,127	126,653	0	(8,558)	2.8638	(24,508)	13,721,831	37,039,785	2.6993
Jul-19	3,461,807	(68,647)	2.0701	7,166,182	131,762	0	(56,530)	2.6203	(148,126)	17,058,461	44,189,603	2.5905
Aug-19	641,271	(15,355)	2.0332	1,303,831	34,540	0	(102,357)	2.5975	(265,870)	17,582,020	45,262,104	2.5743
Sep-19	2,116,099	(42,118)	2.0813	4,404,233	101,611	0	(32,997)	2.4904	(82,175)	19,623,004	49,685,773	2.5320
Oct-19	1,204,238	(26,624)	2.1471	2,585,569	70,328	0	(45,722)	2.4627	(112,601)	20,754,896	52,229,069	2.5165
Nov-19	620,854	(10,817)	2.5172	1,562,795	38,061	0	(846,729)	2.5327	(2,144,489)	20,518,204	51,685,436	2.5190
Dec-19	345,184	(5,691)	2.2163	765,030	20,768	0	(2,060,707)	2.4710	(5,092,045)	18,796,990	47,379,189	2.5206
Jan-20	401,461	(5,668)	1.9801	794,949	25,295	0	(4,087,853)	2.4387	(9,969,053)	15,104,930	38,230,380	2.5310
Feb-20	107,754	(2,016)	1.8108	195,123	4,431	0	(4,744,105)	2.4584	(11,662,765)	10,466,563	26,767,169	2.5574
Mar-20	431,414	(10,800)	1.6719	721,298	24,500	0	(1,725,273)	2.4452	(4,218,633)	9,161,904	23,294,334	2.5425
	18,614,528	(377,655)	2.2361	41,624,373	814,072	0	(14,265,334)	2.4776	(35,343,105)			

	Total LNG Injections					Total LNG Withdrawals				Adjustments To Tank Level		Total LNG Balance		
	Gross DTs	Used/Injected	Price	Commodity	Injection/Charge	W/D Chg/Exp Def	DTs	Price	Amount	DTs	Amount	DTs	Amount	Wtd. Cost
	#	#	\$	\$	\$	\$	#	\$	\$	#	\$	#	\$	\$
Beg. Bal.												1,491,126	5,111,437	3.4279
Apr-19	67,950	(2,100)	2.5725	174,799	778	35,185	(156,938)	3.0032	(471,316)	0	0	1,400,038	4,850,883	3.4648
May-19	301,579	(4,950)	2.4011	724,128	1,855	78,988	(55,246)	3.7267	(205,884)	60	169	1,641,481	5,450,139	3.3203
Jun-19	519,978	(11,620)	2.3354	1,214,356	4,353	175,416	(54,938)	3.6982	(203,171)	0	0	2,094,901	6,641,093	3.1701
Jul-19	634,340	(12,450)	2.1829	1,384,670	4,664	133,074	(32,206)	3.5627	(114,740)	0	0	2,684,585	8,048,761	2.9981
Aug-19	893,929	(12,865)	2.0165	1,802,608	4,820	240,707	(82,221)	3.2447	(266,781)	0	0	3,483,428	9,830,115	2.8220
Sep-19	727,530	(12,115)	2.1102	1,535,209	4,623	263,224	(78,461)	3.1420	(246,528)	0	0	4,120,382	11,386,643	2.7635
Oct-19	367,252	(3,782)	2.1425	786,822	1,417	174,345	(77,147)	3.0745	(237,187)	0	0	4,406,705	12,112,040	2.7485
Nov-19	347,322	(5,810)	2.4967	867,145	2,177	175,577	(271,906)	2.5836	(702,486)	0	0	4,476,311	12,454,453	2.7823
Dec-19	13,585	(415)	2.2457	30,508	155	36,474	(372,194)	2.4875	(925,837)	22,877	71,889	4,140,164	11,667,642	2.8182
Jan-20	0	0	0.0000	0	0	38,675	(648,475)	2.6568	(1,722,855)	0	0	3,491,689	9,983,462	2.8592
Feb-20	0	0	0.0000	0	0	40,792	(576,409)	2.4477	(1,410,890)	0	0	2,915,280	8,613,364	2.9546
Mar-20	0	0	0.0000	0	0	42,182	(189,100)	2.5422	(480,731)	564	1,358	2,726,744	8,176,173	2.9985
	3,873,465	(66,107)	2.1996	8,520,245	24,842	1,434,639	(2,595,241)	2.6928	(6,988,406)	23,501	73,416			

**PIEDMONT NATURAL GAS COMPANY, INC.**  
**DOCKET NO. 2020-4-G**  
**HEDGING ACCOUNT ACTIVITY**  
**(GAIN)/LOSS RECOGNIZED AND OTHER EXPENSES**  
**FOR TWELVE MONTHS ENDED MARCH 31, 2020**

Month	Net Options Premium	Purchased Options Fees	RMI Fee	Proceeds from Positions	Exercised Options Fees	Net (Gain) or Loss	Cumulative (Gain) or Loss
	\$	\$	\$	\$	\$	\$	\$
Beginning Balance							41,442,913
Apr-19	105,390	1,504	558	0	0	107,452	41,550,365
May-19	42,750	697	558	0	0	44,005	41,594,370
Jun-19	226,710	3,364	558	0	0	230,632	41,825,002
Jul-19	46,160	728	558	0	0	47,446	41,872,448
Aug-19	43,840	713	558	0	0	45,111	41,917,559
Sep-19	21,600	372	558	0	0	22,530	41,940,089
Oct-19	61,070	946	558	0	0	62,574	42,002,663
Nov-19	37,080	558	558	0	0	38,196	42,040,859
Dec-19	56,160	837	558	0	0	57,555	42,098,414
Jan-20	98,560	1,612	0	0	0	100,172	42,198,586
Feb-20	52,000	775	0	0	0	52,775	42,251,361
Mar-20	56,560	868	1,148	0	0	58,576	42,309,937
	847,880	12,974	6,170	0	0	867,024	